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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,848	03/15/2006	Jens-Peter Schломка	DE 020158	6169

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EXAMINER

KIKNADZE, IRAKLI

ART UNIT	PAPER NUMBER
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2882

MAIL DATE	DELIVERY MODE
09/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/518,848	SCHLOMKA ET AL. <i>UV</i>
	Examiner Irakli Kiknadze	Art Unit 2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 June 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 December 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/28/2007
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. In response to the Office action mailed March 29, 2007 the Amendment has been received on June 28, 2007.

Claims 1-9 have been amended.

Claims 10-20 have been newly added.

Claims 1-20 are currently pending in this application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 10, the recitation "does not significantly exceed" renders the claims indefinite because the term "not significantly" does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding claim 8, the recitation "at least substantially" renders the claims indefinite because the term "substantially" is a broad term and it does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 2-9 are rejected by virtue of their dependence.

Allowable Subject Matter

4. The indicated allowability of claim 9 is withdrawn in view of the newly considered reference(s) to Komardin (US Patent 6,175,117 B1). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Komardin et al. (US Patent 6,175,117 B1).

With respect to claim 1, Komardin teaches (see Fig.1) apparatus comprising: a radiation source (20), a detector arrangement (28) and a device (18) (column 6, lines 8-12) with which transmission radiation (42) having traversed an examination zone (32) (column 6, lines 25-31) is attenuated by a filter (26) such that the intensity of radiation

received by a transmission beam zone (38) of the detector (28) is the same order as the intensity of the radiation received by the scattering zone (40) (column 7, lines 11-21).

With respect to claim 2, Komardin teaches that the radiation source (20) is arranged to form an essentially fan-shaped radiation beam (30) (see Figs. 1 and 3) and the detector arrangement (28) comprises a plurality of detector elements (180) which are arranged in rows and columns in conformity with the length and the width, respectively, of the cross-section of the radiation beam in the detector plane (see Fig. 12; column 12, lines 13-15).

With respect to claim 3, Komardin teaches that the detector arrangement (28) comprises a plurality of detector elements (180) that are arranged in a row (see Fig. 12; column 12, lines 13-15).

With respect to claim 4, Komardin teaches (Figs. 2 and 3) that the device includes a first collimator (22 and 24) which is arranged on the radiation source (20), the radiation source (20) or the first collimator (22 and 24) being arranged so as to be offset relative to one another in a direction perpendicular to a propagation direction of the radiation beam (30) in such a manner that the transmission radiation having traversed the examination zone modified by means of the movable filter (26) is not incident on the detector arrangement (28) (see Figs. 2 and 3).

With respect to claim 5, Komardin teaches a first drive unit for displacing the radiation source (20) or the first collimator (22 and 24) relative to one another in such a manner that scattered radiation emanating from the examination (32) at different angles is detected (Figs. 2 and 3; column 98, lines 35-55).

With respect to claim 6, Komardin teaches a second collimator (26) that is arranged between the examination zone (32) and the detector arrangement (28) and includes a region (27) whereby the transmission radiation having traversed the object (32) to be examined is stopped at least partly by opaque regions (102) (Figs. 6A and 6B; column 10, lines 37-67).

With respect to claim 7, Komardin teaches that the region is provided with an opening where through a part of the transmission radiation incident on the region reaches the detector arrangement (28) (see Fig. 1; column 7, lines 11-21).

With respect to claim 8, Komardin teaches that the detector (28) is shifted (see Fig. 1; illustrated by the arrow 70) in a direction perpendicular to a propagation direction of the radiation beam (30) in such a manner that the radiation having traversed the examination zone modified by means of the movable filter (26) is directed at least substantially so as to bypass the detector arrangement (28) (see Fig. 1; column 6, lines 42-49 and column 8, lines 22-36).

With respect to claim 9, Komardin teaches a second drive for displacing the detector arrangement (28) for detecting the scattered radiation emanating from the object at different angles (Fig.1; column 7, lines 32-38).

With respect to claim 10, Komardin teaches a computed tomography apparatus, comprising (see Fig.1):

- a radiation source (20);
- a detector arrangement (28); and

a device (18) with which radiation having traversed an examination zone is stopped by a filter (26) at least to such an extent that its intensity which is incident on the detector arrangement (28) is the same order as the intensity of radiation scattered in the examination zone and incident on the detector arrangement (column 7, lines 11-21), wherein the device includes a drive unit for displacing (as illustrated by arrow 54) the detector arrangement (28) in such a manner that scattered radiation emanating from an object (32) to be examined in the examination zone at different angles is detected (Fig. 1; 32-38).

With respect to claim 11, Komardin teaches a method, comprising: attenuating transmission radiation within a radiation beam after the beam traverses an examination zone, wherein the attenuated transmission radiation (42) has an intensity that is about the same as an intensity of scatter radiation; and detecting the attenuated transmission radiation and the scatter radiation with a detector (28) (Fig. 1; column 6, lines 3-12 and 25-31; column 7, lines 11-21).

With respect to claim 12, Komardin teaches directing the transmission radiation to bypass the detector (28) (see Fig. 2).

With respect to claims 13 and 14, Komardin teaches selectively positioning a source collimator (22) and a radiation source (20) with respect to each other to alter the width of the beam and direct the beam so that the transmission radiation beam (42) corresponding to the shape of the cross section of the filter (26) (column 6, lines 32-33 and 42-45) and bypasses the detector (28) (Fig. 1 and 4; column 9, lines 46-56).

With respect to claim 15, Komardin teaches that the transmission and scatter

radiation are concurrently detected during a data acquisition cycle (column 13, lines 45-64).

With respect to claim 16, Komardin teaches, attenuating the transmission radiation using a material having a thickness configured to attenuate the transmission radiation so that its intensity is about the same as the intensity of scatter radiation (column 7, lines 11-21).

With respect to claim 17, Komardin teaches attenuating the transmission radiation includes collimating the transmission radiation so that only part of the transmission radiation illuminates the detector (28) (Fig.8).

With respect to claim 18, Komardin teaches positioning the detector (28) so that only scatter radiation illuminates the detector (Fig.1; column 7, lines 32-41).

With respect to claim 19, Komardin teaches that the intensity of the attenuated transmission radiation is greater than the intensity of the scattered radiation. Komardin uses the filter (26) to reduce the intensity if the transmission radiation (column 7, lines 1-15).

With respect to claim 20, Komardin teaches that the intensity of the attenuated transmission radiation is non-zero (column 7, lines 1-15).

Response to Arguments

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ik/August 31, 2007



Irakli Kiknadze
Patent Examiner